

In the Specification:

Please amend the paragraph on page 3, beginning at line 1, as shown:

Absorbed BBI is measurable using antibodies to reduced BBI, produced by injection into experimental animals and utilized in immunoassays (Wan *et al.*, 1995). BBI has been assessed in the blood, tissue and urine of rodents and dogs after the ingestion of BBIC permitting pharmacokinetic studies, although it has not yet been feasible to measure BBI levels in the blood of humans after oral BBIC dosing. However, it has been found in the urine, starting within several hours after a single oral dose (Wan *et al.*, *Cancer Epidem. Biomarkers & Prevention* [9:741-747 (2000)] 8:601-608 (1999)). Of note, studies in orally-dosed animals have shown that some BBI can be subsequently found in the CNS even when the blood-brain barrier is intact (Kennedy, AR, personal communication).

Please amend the paragraph on page 4, beginning at line 9, as shown:

It is also known that BBI, as well as several other inhibitors of chymotrypsin proteolytic activity, have the ability to prevent the induction of superoxide anion radicals and hydrogen peroxide from stimulated human polymorphonuclear leukocytes and macrophage-like cells (Frenkel *et al.*, *Carcinogenesis* 8:1207-1212 (1987); Ware *et al.*, [*Cancer and Nutrition*] *Nutr. Canc.* 33:174-177 (1999)). Proteases and free radicals produced by macrophages are closely associated with the production of inflammation. For example, Multiple Sclerosis (MS) is characterized by inflammation and increased numbers of activated immunocytes of macrophage and T cell lineage (Hauser *et al.*, In *Harrison's Principles of Internal Medicine*. Fauci *et al.* (eds). New York, McGraw-Hill, 1998, pp. 2409-2419).

Please amend the paragraph on page 5, beginning at line 5, as shown:

Proteases are associated with many facets of immune system function and immune system disorders (Cuzner *et al.*, *J. Neuroimmunol.* [94] 6:1-14 (1999); Vaday *et al.*, *J. Leukoc. Biol.* 67:149-159 (2000)). A variety of proteases are increased in MS lesions, including lysosomal proteases and matrix metalloproteinases gelatinase A and B (MMP-2 and 9, respectively) (Cuzner *et al.*, 1999; Halonen *et al.*, *J. Neurol. Sci.* 79:267-274 (1987); Kieseier *et al.*, *Curr. Opin. Neurol.* 12:323-336 (1999); Hartung *et al.*, *J. Neuroimmunol.* 107:140-147 (2000); Bever *et al.*, *Neurology* 53:1380-1381 (1999); Maeda *et al.*, *J. Neuropathol. Experimental Neurol.* 55:300-309 (1996)).

Please amend the paragraph on page 11, beginning at line 24, as shown:

FIG. 10 graphically depicts the effect of BBIC for the treatment of Lewis rats with EAE, showing the difference in inflammatory demyelination in the CNS (brain and spinal cord) of BBIC-treated animals as compared with matching, untreated control animals. In the bar graph the first column provides data on the effect in "brain" tissue, while the remaining 4 columns provide data from various regions of the spinal cord ("sc"). Specifically, "sc(c)" refers to the cervical region of the spinal cord, "sc(t)" refers to the thoracic region of the spinal cord, "sc(l)" refers to the lumbar region of the spinal cord, and "sc(s)" refers to the sacral region of the spinal cord. The asterisks (*) are used as noted above to show that there is a statistically significant change between the data from the untreated animals and the data from the matched treated animals.